

USDA-ARS Plant Introduction and Research Phaseolus Germplasm Program Pullman, WA Cora Borgens Summer, 2021



(Above and below)
 Learning manual
 germination



(Above) Rare chimera of
Phaseolus vulgaris

Overview

USDA-ARS Plant Introduction and Research aims to acquire plant germplasm, research, test, characterize, and maintain germplasm collections.

The Phaseolus germplasm program grows varieties of the common bean *Phaseolus vulgaris*, and close relatives *P. coccineus*, *P. lunatus*, *P. polystachios*, and *P. acutifolius* for germplasm collection, maintenance, and research. Data collected goes into the national germplasm research information network (GRIN) database. Seed collected goes into the seed storage facility in Pullman, WA.

Responsibilities

- Sweeping/Cleaning the greenhouse
- Harvesting beans
- Taking leaf, flower, pod, and whole plant photos
- Taking seed photos (shown on the right)
- Helping with manual germination of low-germ accessions (shown on left)
- Taking samples for DNA/Virus testing
- Drip irrigation installation and maintenance
- Assisting with planting seed/transplanting seedlings
- Hand pollination of *Phaseolus coccineus* and *Phaseolus polystachios*
- Data entry and maintenance in Excel spreadsheets
- Formatting and naming photos for GRIN database
- Monitoring insect populations in greenhouse

Summary

This internship provided me with far more practical experience in my field than I could have hoped for. The variety of tasks given helped me learn the intricacies of working as a greenhouse technician.



(Above) Example of
 variety of beans grown



(Above and below)
 Displays of seed sizes and
 colors



(Above) Example of seed
 photo taken for GRIN
 database